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10/816,319	04/01/2004	Matthew David Maddin	418268847US	9120

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PERKINS COIE LLP/MSFT
P. O. BOX 1247
SEATTLE, WA 98111-1247

EXAMINER
STRANGE, AARON N

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2008*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19-38* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

1.   The Examiner would like to note that the present application has been

reassigned to a new Examiner.

Response to Arguments

2.   Applicant's arguments with respect to claims 19-38 have been considered but are

generally moot in view of the new ground(s) of rejection.

3.   However, with regard to claim 19, and Applicant's assertion that Geyer's peer-to-

peer system only receives a response from "the client that manages the GSO"

(Remarks 11), the Examiner notes that Applicant's interpretation relies on Geyer's

statement that a client seeking to change an object notifies other clients and "awaits

receipt from the other client" (Remarks 11).

However, this portion of Geyer appears to be a typographical error which should

read "awaits receipt from the other client[s]". When read in context with the surrounding

disclosure, Geyer is referring to the peer-to-peer embodiment in which there are three

or more clients, each including the functionality of the GSO server (and thus being

responsible for "managing" the GSOs). When one of the clients wishes to modify a

GSO, it "notifies the other clients" and likely receives responses from each of them, not

merely from "the client that manages the GSO" (Remarks 11), since the client sending

the notification is the client managing the GSO. The most reasonable interpretation of

the cited portion of Geyer is that each notified client responds to the client that sent the

notification, in order to ensure that the notified clients properly received and applied the

changes.

Since the language of Geyer is ambiguous, the Examiner has applied a newly

discovered reference (Souder) that teaches notifying all nodes containing a copy of an

object to be modified, and waiting for all nodes to confirm the notification, prior to

modifying the object. The combination of Geyer and Souder does not depend on the

number of notified clients that respond to a notification, since Souder teaches waiting for

a response from every client to ensure that the object is updated at all clients containing

a copy of the object.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

5.   Claims 31-38 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

6.   Claim 31 is directed to a "system" comprising a plurality of "component[s]" for

performing various functions. Based on the specification, it appears that these functions

are performed by computer software. Additional evidence of this appears in claims 24,

which claims "instructions" for performing the same functionality. Since none of the

components of claim 31 are limited to hardware, the claim includes at least some

software-only embodiments. Since the claim is not limited to statutory subject matter, it

is non-statutory.

7.   All claims not individually rejected are rejected by virtue of their dependency from

the above claims and their failure to correct the above noted deficiencies.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 19-38 rejected under 35 U.S.C. 103(a) as being unpatentable over Geyer

et al. (US 20050165859) in view of Souder et al. (US 5,806,074).

10.   In regards to claim 19, Geyer et al. discloses a method for sharing system

network objects between computers, each system network object having multiple copies

stored at different computers, comprising:

    a.   providing a shared context **(¶0023 line(s) 11-16)**, the shared context

    having a unique identifier **(fig. 2 #32, ¶0029 line(s) 10)**, a number of associated

    system network objects **(fig. 2 #34, ¶0030 line(s) 1-2)**, identifications of

computers that store copies of each system network object (¶0025 line(s) 8-11,

¶0027 line(s) 1-2, 5-11), and security permissions indicating access rights of

computers to the context and the system network objects (fig. 2 #32, ¶0023

line(s) 12-15, ¶0029 line(s) 12);

b.   receiving from a first computer a request to join the shared context

identified by the unique identifier (¶0026 line(s) 16-17, ¶0030 line(s) 14-19,

¶0035 line(s) 8-9, teach that a user can request to gain access (join) a

shared object (chat session).);

c.   in response to receiving from the first computer a request to join the

shared context (¶0026 line(s) 17-19), determining whether the first computer has

permission to join the shared context and if the first computer has permission to

join the shared context (¶0039 line(s) 7-10), granting permission to the first

computer to join the shared context (¶0036 line(s) 11-13, ¶0039 line(s) 14-17);

and

d.   after the first computer has joined the shared context (¶0026 line(s) 17-

19),

        i.   receiving from the first computer a request to modify a first system

        network object associated with the shared context (¶0035 line(s) 6-8,

        ¶0039 line(s) 5-7);

        ii.   in response to receiving from the first computer a request to modify

        a first system network object associated with the shared context,

determining whether the first computer has permission to modify the first

system network object and if the first computer has permission to modify

the first system network object **(¶0039 line(s) 7-10)**, granting permission

to the first computer to modify the first system network object **(¶0036**

line(s) 11-13, ¶0039 line(s) 14-17).

Geyer further discloses that, in a system where there are three or more clients, a

client seeking to modify an object notifies the other clients of the modification and awaits

receipt of a confirmation from at least some of the clients (¶41). However, Geyer fails to

specifically disclose that modification of the object copies is prevented unless and until a

confirmation is received from all other clients.

Souder discloses a well-known method for maintaining coherency among

multiple copies of a data object. Souder discloses that the technique known as

"synchronous replication" results in an update to a data object being immediately

replicated to all other copies of the object (col. 2. ll. 1-5). Furthermore, the update

transaction is not completed until all nodes are available to be updated (col. 2, ll. 16-18).

This would have been an advantageous addition to the system disclosed by Geyer

since it would have provided a simple method of guaranteeing that all copies of the data

object are the same (col. 2, ll. 8-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to use a synchronous update procedure to guarantee that

all copies of a particular data object are the same, by preventing changes to the data object until all nodes containing a copy of the object are available.

11.   In regards to claims 20, 26 and 33 Geyer et al. discloses wherein the request to modify a first system network object includes a request to invoke a method of the first system network object **(¶0030 line(s) 14-17, ¶0035 line(s) 8-9)**.

12.   In regards to claims 21 and 27 Geyer et al. discloses wherein the first computer stores at least one copy of the first system network object **(¶0026 line(s) 1-4)**.

13.   In regards to claims 22, 28, and 35 Geyer et al. discloses wherein the first computer does not store a copy of the first system network object **(¶0026 line(s) 1-4, teach that the database is optional for storing the objects)**.

14.   In regards to claims 23, 29, and 26 Geyer et al. discloses notifying computers associated with the shared context when the first computer joins the shared context **(¶0026 line(s) 19-21)**.

15.   In regards to claim 24 Geyer et al. discloses, a computer-readable medium containing instructions for sharing system network objects between computers, each system network object having multiple copies stored at different computers, by a method comprising:

e.   providing a shared context **(¶0023 line(s) 11-16)**, the shared context

having a number of associated system network objects **(fig. 2 #34, ¶0030 line(s)
1-2)**;

f.   receiving from a first computer a request to join the shared context **(¶0026
line(s) 16-17, ¶0030 line(s) 14-19, ¶0035 line(s) 8-9, teach that a user can
request to gain access (join) a shared object (chat session).)**;

g.   determining whether the first computer has permission to join the shared
context and if the first computer has permission to join the shared context **(¶0039
line(s) 7-10)**, granting permission to the first computer to join the shared context
(¶0036 line(s) 11-13, ¶0039 line(s) 14-17); and

h.   after the first computer has joined the shared context **(¶0026 line(s) 17-
19)**,

iii.   receiving from the first computer a request to modify a first system

network object associated with the shared context **(¶0035 line(s) 6-8,
¶0039 line(s) 5-7)**;

iv.   determining whether the first computer has permission to modify

the first system network object and if the first computer has permission to

modify the first system network object **(¶0039 line(s) 7-10)**, granting

permission to the first computer to modify the first system network object

(¶0036 line(s) 11-13, ¶0039 line(s) 14-17);

Geyer further discloses that, in a system where there are three or more clients, a client seeking to modify an object notifies the other clients of the modification and awaits receipt of a confirmation from at least some of the clients (¶41). However, Geyer fails to specifically disclose that modification of the object copies is prevented unless and until a confirmation is received from all other clients.

Souder discloses a well-known method for maintaining coherency among multiple copies of a data object. Souder discloses that the technique known as "synchronous replication" results in an update to a data object being immediately replicated to all other copies of the object (col. 2. ll. 1-5). Furthermore, the update transaction is not completed until all nodes are available to be updated (col. 2, ll. 16-18). This would have been an advantageous addition to the system disclosed by Geyer since it would have provided a simple method of guaranteeing that all copies of the data object are the same (col. 2, ll. 8-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a synchronous update procedure to guarantee that all copies of a particular data object are the same, by preventing changes to the data object until all nodes containing a copy of the object are available.

16.   In regards to claims 25 and 32 Geyer et al. discloses wherein the shared context further comprises identifications of computers that store copies of each system network object (**¶0025 line(s) 8-11, ¶0027 line(s) 1-2, 5-11**) and security permissions indicating

access rights of computers to the context and the system network objects **(fig. 2 #32,**

¶0023 line(s) 12-15, ¶0029 line(s) 12).

17.   In regards to claim 30 Geyer et al. discloses wherein when at least one computer

that stores a copy of the first system network object is not available to modify its copy,

none of the copies of the first system network object are modified **(¶0041 line(s) 7-17,**

22-25, teach that the client waits before beginning modification till after the client

response to the request, inherently when the client is not available not

updating/modifying any of the copies.).

18.   In regards to claim 31 Geyer et al. discloses, a computer system for sharing

system network objects between computers, each network object having multiple copies

stored at different computers, the system comprising:

     i.   a component that provides a shared context **(¶0023 line(s) 11-16)**, the

shared context having a number of associated system network objects **(fig. 2**

#34, ¶0030 line(s) 1-2);

     j.   a component that receives from a first computer a request to join the

shared context **(¶0026 line(s) 16-17, ¶0030 line(s) 14-19, ¶0035 line(s) 8-9,**

teach that a user can request to gain access (join) a shared object (chat

session).);

     k.   a component that determines whether the first computer has permission to

join the shared context and if the first computer has permission to join the shared

context **(¶0039 line(s) 7-10)**, granting permission to the first computer to join the

shared context **(¶0036 line(s) 11-13, ¶0039 line(s) 14-17)**;

l.   a component that, after the first computer has joined the shared context

(¶0026 line(s) 17-19),

v.   receives from the first computer a request to modify a first system

network object associated with the shared context **(¶0035 line(s) 6-8,**

¶0039 line(s) 5-7); and

vi.   determines whether the first computer has permission to access the

first system network object and if the first computer has permission to

access the first system network object, grants permission to the first

computer to access the first system network object **(¶0032 line(s) 1-6,**

¶0039 line(s) 7-10); and

Geyer further discloses that, in a system where there are three or more clients, a

client seeking to modify an object notifies the other clients of the modification and awaits

receipt of a confirmation from at least some of the clients (¶41). However, Geyer fails to

specifically disclose that modification of the object copies is prevented unless and until a

confirmation is received from all other clients.

Souder discloses a well-known method for maintaining coherency among

multiple copies of a data object. Souder discloses that the technique known as

"synchronous replication" results in an update to a data object being immediately

replicated to all other copies of the object (col. 2. ll. 1-5). Furthermore, the update

transaction is not completed until all nodes are available to be updated (col. 2, ll. 16-18).

This would have been an advantageous addition to the system disclosed by Geyer

since it would have provided a simple method of guaranteeing that all copies of the data

object are the same (col. 2, ll. 8-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to use a synchronous update procedure to guarantee that

all copies of a particular data object are the same, by preventing changes to the data

object until all nodes containing a copy of the object are available.

19.   In regards to claim 34 Geyer et al. discloses a component that associates at least

one system network object stored on the first computer with the shared context when

the first computer joins the shared context **(¶0029 line(s) 4-12)**.

20.   In regards to claim 37 Geyer et al. discloses wherein the request to access a first

system network object includes a request to modify the first system network object

(¶0035 line(s) 6-8, ¶0039 line(s) 5-7).

21.   In regards to claim 38 Geyer et al. discloses wherein the component that

synchronizes further comprises:

  m.   a component that after the first computer has been granted permission to

  modify the first system network object, determining whether each computer that

  stores a copy of the first system network object **(¶0026 line(s) 1-4)** as indicated

  by the shared context is available to modify its copy **(¶0041 line(s) 7-17, 22-25,**

  teach that the client waits before beginning modification till after the client

response to the request (i.e. determining if all the computers are available

for modification.).); and

n.   a component that when it is determined that each computer that stores a

copy of the first system network object is available to modify its copy

synchronizes the first system network object by notifying each computer that

stores a copy of the first system network object of the modification so that each

computer can modify its copy of the first system network object **(¶0025 line(s) 8-**

11, ¶0039 line(s) 20-23) and when at least one computer that stores a copy of

the first system network object is not available to modify its copy, does not modify

any copies of the first system network object **(¶0041 line(s) 7-17, 22-25, teach**

that the client waits before beginning modification till after the client

response to the request, inherently when the client is not available not

updating/modifying any of the copies.).

Conclusion

22.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to AARON STRANGE whose telephone number is

(571)272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron Strange/
Examiner, Art Unit 2453